

IN THE CLAIMS:

1. (Previously presented) A method comprising:
measuring drift of a clock within an implantable medical device; and
generating a correction factor to correct for the drift;
detecting a first time output from the clock of the implantable medical device at a first time;
detecting a first time output from a reference clock at the first time;
detecting a second time output from the clock of the implantable medical device at a second time;
detecting a second time output from the reference clock; and
calculating the drift based on the difference between the second time output from the clock of the implantable medical device and the second time output from the reference clock, wherein calculating the drift includes determining a slope of a divergence between a first timeline defined between the first time and the second time for the clock of the implantable medical device and a second time line defined between the first time and the second time for the reference clock.
2. (Cancelled)
3. (Cancelled)
4. (Original) The method of claim 1, further comprising:
correlating time data from the clock to a reference time frame by
correcting for the drift.
5. (Original) The method of claim 4, wherein the time data is received at a programmer and then correlated.

6. (Original) The method of claim 1, further comprising:
programming the implantable medical device with the correction factor.
7. (Original) The method of claim 1, further comprising:
identifying lost time; and
correcting the lost time.
8. (Original) The method of claim 7, wherein identifying lost time includes
identifying periods of therapy delivery.
9. (Original) The method of claim 7, wherein correcting includes modifying
data from the IMD so that the lost time is added back to the data temporally
proximate where the time was lost.
10. (Previously presented) An apparatus for correlating time data from an
implantable medical device comprising:
communication means for communicating with and receiving time data
from an implantable medical device;
measuring means for determining an amount of drift in the time data
relative to a reference time;
correction means for correcting the data by removing the drift so that the
corrected data correlates to the reference time;
means for determining differences between the time data and the
reference time due to time zone variations; and
means for modifying the time data to eliminate the differences due to time
zone variations.

11. (Original) The apparatus of claim 10, further comprising:
means for determining lost time; and
means for correcting for the lost time.
12. (Cancelled)
13. (Original) The apparatus of claim 10, further comprising:
measuring means for measuring a frequency of an oscillator within a clock circuit of the implantable medical device; and
programming means for generating a correction factor to correlate the frequency to a standard time format.
14. (Original) The apparatus of claim 10, further comprising means for simultaneously synchronizing time data from multiple implantable medical devices to the reference time.
15. – 18. (Cancelled)
19. (Previously presented) A computer readable medium containing instructions that when executed on an electronic device cause the electronic device to perform the following functions:
measuring a drift of a clock within an implantable medical device by
detecting a first time output from the clock of the implantable medical device at a first time;
detecting a first time output from a reference clock at the first time;
detecting a second time output from the clock of the implantable medical device at a second time;
detecting a second time output from the reference clock; and

calculating the drift based on the difference between the second time output from the clock of the implantable medical device and the second time output from the reference clock and determining a slope of a divergence between a first timeline defined between the first time and the second time for the clock of the implantable medical device and a second time line defined between the first time and the second time for the reference clock; and

generating a correction factor to correct for the drift.

20. – 21. (Cancelled)

22. (Original) The medium of claim 20, further including correlating time data from the clock to a reference time frame by correcting for the drift.

23. (Currently amended) The medium of claim 20, wherein the instructions cause the electronic device to program ~~programming~~ the implantable medical device with a correction factor that corrects for the drift.